

Serial No. 09/629,321

Attorney Docket No. PF01869NA

IN THE CLAIMS:

Please amend claim 1, 7, 11 through 13 and 22 as follows:

- C1
- BT
1. (Currently Amended) An apparatus comprising:  
at least one sensor communicating sensor added information to a communication device within a wireless ad hoc network, wherein the communication device controls to control a power consumption level of the communication device or another device within the wireless ad hoc network, or adjusts to adjust a network configuration of the wireless ad hoc network in response to the sensor added information.
  2. (Original) The apparatus as claimed in claim 1, wherein the at least one sensor includes a smart sensor capable of taking multiple types of measurements at programmable intervals and transmitting the measurements to the communication device at the programmable intervals.
  3. (Original) The apparatus as claimed in claim 1, wherein the communication device transmits the sensor added information to a central controller.
  4. (Original) The apparatus as claimed in claim 1, wherein the communication device uses a service discovery protocol to look for a fixed position sensor for additional sensor information to adjust the power level of the communication device.

Serial No. 09/629,321

Attorney Docket No. PF01869NA

C/

5. (Original) The apparatus as claimed in claim 1, wherein the at least one sensor includes a motion sensor, the motion sensor being used to place the communication device in a stand-by power mode when the communication device is moving or to place the communication device in an active mode when the communication device is still.

DT

6. (Original) The apparatus as claimed in claim 1, wherein the at least one sensor determines a position of the communication device and if the position of the wireless communication device is an active position, the communication device is placed in an active power mode and if the position of the communication device is an inactive position, the communication device is placed in a stand-by power mode.

7. (Currently Amended) A wireless network comprising:  
at least one master device, each of the at least one master devices being capable of initiating an action or requesting a service on ~~the~~ a wireless ad hoc network; and  
a plurality of slave devices wirelessly connected to each other and to a corresponding master device, at least one of the plurality of slave devices or the master device including at least one sensor, wherein processed sensor information from the at least one sensor is shared by each of the plurality of slave devices and the corresponding master device.

8. (Original) The wireless network as claimed in claim 7, wherein respective power levels of at least one of the plurality of slave devices or the corresponding master device are adjusted in accordance with the processed sensor information.

Serial No. 09/629,321

Attorney Docket No. PF01869NA

C1  
9. (Original) The wireless network as claimed in claim 7, wherein at least one of the plurality of slave devices uses a service discovery protocol to look for a fixed position sensor for additional sensor information, the additional sensor information being used to select an alternate master device.

B1  
10. (Original) The wireless network as claimed in claim 7, wherein at least one of the plurality of slave devices uses the shared processed sensor information to select an alternate master device.

11. (Currently Amended) The wireless network as claimed in claim 7, further comprising a central controller connected to the at least one master device, wherein the central controller utilizes the processed sensor information to determine capacity allocation and device allocation of the plurality of slave devices and the corresponding master device to improve a capacity of the wireless ad hoc network.

12. (Currently Amended) The wireless network as claimed in claim 11, wherein the central controller utilizes the processed sensor information to adjust the device allocation of the plurality of slave devices and the corresponding master device to improve the capacity of the wireless ad hoc network.

Serial No. 09/629,321

Attorney Docket No. PF01869NA

C1  
BT

13. (Currently Amended) A method of improving battery life of a wireless communication device, comprising:

- sensing environmental conditions within a predetermined distance of the wireless communication device with a plurality of coupled sensors;
- determining a usage pattern match corresponding to a crowded area based on the sensed environmental conditions; and
- adjusting a power consumption level of the wireless communication device in accordance with the usage pattern match.

14. (Original) The method as claimed in claim 13, wherein the plurality of sensors are selected from the group consisting of a motion sensor, a light sensor, a crowd sensor, a range sensor, a moisture sensor, an inertial sensor, an accelerometer sensor and a sound sensor.

15. (Original) The method as claimed in claim 13, wherein the wireless communication device switches from a stand-by power mode to an active mode when the sensed environmental conditions satisfy a predetermined condition and automatically transmits a predetermined message to a predetermined device after the predetermined condition is satisfied.

16. through 21. (Canceled)

22. (Currently Amended) The apparatus of claim 1, wherein the ad hoc network configuration of the network is adjusted to readjust device allocation to a different device.